

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003947**Date Inspected:** 25-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2230**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG-PMT**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Orthotropic Box Girder (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item	Description	WBS	Dwg No.	Status
1	PMT OBG	NA	NA	Welding/Macroetch Sam

Bay 1: Caltrans QA inspector monitored OBG Production Monitoring Test (PMT) for deck panel DP227-001. The magnetic particle test (MT) of the tack welds was performed by ZPMC QC/MT inspector. The visual inspection of tack welds and root gap was performed by ABF, ZPMC and Caltrans. The start time for welding of the PMT is 00:31 hours and completion time 01:04, 09-26-08. Caltrans QA inspector verified and documented the welding amperage, voltage and travel speed during the gas metal arc welding (GMAW) and submerged arc welding (SAW) process, welds 1 thru 6. At the completion of the GMAW root pass and SAW cover pass. The welds were visually inspected by ABF, ZPMC and Caltrans. Caltrans QA inspector witness ZPMC QC/UT inspector identified as Xue Hai Yong inspect the welds for depth of penetration and conformance. Caltrans QA inspector identified designated locations for macro sampling per contract requirements. The macroetch samples were evaluated with a 7X optical comparator and accepted by ZPMC, ABF and Caltrans. See Caltrans U-ribs PMT Inspection Sheet, dated 09-26-08 and ZPMC production monitoring test plate inspection report, dated 09-26-2008 for additional information. The following picture illustrates welding of the PMT and typical macroetch specimens.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

As identified within the contents of this report.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 138-1694-2685, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hasler, Mike	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer

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